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EXAMINER

PAIK, SANG YEOP

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSEPH A. DANIEL, TODD E. KOOKEN, and
LIFENG LUO

Appeal 2015-002308
Application 13/572,354
Technology Center 3700

Before ALLEN R. MacDONALD, KEN B. BARRETT and
CARL W. WHITEHEAD JR., *Administrative Patent Judges*.

MacDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

Exemplary Claims

Exemplary claims 1 and 8 under appeal read as follows (emphasis added):

1. A power source comprising:
 - an input rectifier for receipt of an AC input signal to output a rectified DC signal;
 - a power factor correcting converter connected to said input rectifier to convert said rectified DC signal to a first fixed DC voltage signal*** having a first magnitude to define a first DC bus;
 - a DC to DC inverter connected to said first DC bus to convert said first fixed DC signal to a second fixed DC voltage signal having a second magnitude to define a second DC bus, where said second magnitude is lower than said first magnitude; and
 - a regulated output converter coupled to said second DC bus to convert said second fixed DC signal to an output signal for a welding process, said output converter being regulated by a feedback signal from said welding process.

8. A power source for an electric arc welding process, said power source comprising:
 - a first stage to convert an AC input signal to a ***first fixed DC voltage signal*** for output on a first DC bus;
 - a second stage coupled to said first DC bus*** to convert said first fixed DC voltage signal to a second fixed DC voltage signal electrically isolated from said first fixed DC output signal for output on a second DC bus; and
 - a third stage coupled to said second DC bus to convert said second fixed DC voltage signal to a current suitable for welding.

References

Moriguchi et al.	US 6,069,811	May 30, 2000
Church	US 6,504,132 B1	January 7, 2003
Dodge et al.	US 7,274,000 B2	September 25, 2007
Daniel et al.	US 8,269,141 B2	September 18, 2012

Rejections

The Examiner rejected claims 1, 2, 4, 5, 7, 18, and 19 are under 35 U.S.C. § 103(a) as being unpatentable over Church.¹

The Examiner rejected claims 8, 9, and 11–13 under 35 U.S.C. § 102(b) as being anticipated by Church.²

The Examiner rejected claims 3, 6, 10, 14–16, and 20 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Church and Moriguchi.³

¹ Separate patentability is argued for claim 1. Separate patentability is not argued for claims 2, 4, 5, 7, 18 and 19. Thus, the rejection of these claims turns on our decision as to claims 1 and 8. Except for our ultimate decision, this rejection of these claims is not discussed further herein.

² Separate patentability is argued for claim 8. Separate patentability is not argued for claims 9 and 11–13. Except for our ultimate decision, the Examiner's rejection of claims 9 and 11–13 are not discussed further herein.

³ Separate patentability is argued for claim 14. Separate patentability is not argued for claims 3, 6, 10, 15, 16, and 20. Thus, the rejection of these claims turns on our decision as to claims 1, 8, and 14. Except for our ultimate decision, this rejection of these claims is not discussed further herein.

The Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Church, Moriguchi, and Dodge.⁴

The Examiner rejected claims 1–20 on the grounds of nonstatutory obviousness-type double patenting as not being patentably distinct from claims 1–76 of Daniel in combination with Church, Moriguchi, and Dodge. Final Act. 7–8.⁵

Appellants' Contentions

1. Appellants contend the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a) because:

[T]he purported power factor correcting boost converter (30, 62, 24, 32, 34) does not produce a first fixed DC signal across leads (20, 22) as alleged. . . . Instead, the cited elements of the Church dual boost type power factor correcting stage 30 convert a rectified DC signal at leads 20, 22, not a fixed DC signal, to an alternating current signal as an input to the primary side of an isolating transformer 50.

App. Br. 11–12.

2. Appellants contend the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a) because:

[A]ccording to Church, the DC voltage across leads (20, 22) is a rectified DC voltage signal and not a first fixed DC signal as alleged in the rejection of claims.

⁴ Separate patentability is not argued for claim 17. Thus, the rejection of this claim turns on our decision as to claim 14. Except for our ultimate decision, this rejection is not discussed further herein.

⁵ Separate patentability is not argued for claims 1–20. We select claim 8 as representative. Except for our ultimate decision, only the rejection of claim 8 is discussed further herein.

App. Br. 8.

Church does not show or describe a fixed DC voltage at leads (20, 22). . . . Therefore Church does not show or describe a DC to DC inverter converting a first fixed DC signal to a second fixed DC signal as claimed. Because the purported DC to DC inverter (40) does not convert a first fixed DC signal as claimed, Church does not show or describe the claimed DC to DC inverter as alleged.

App. Br. 12.

3. Appellants contend the Examiner erred in rejecting claim 8 under 35 U.S.C. § 102(b) because:

[Church's] first stage does not produce a first fixed DC signal across leads (20, 22) as alleged. . . . Instead, the cited elements of the Church rectifier (14) and dual boost type power factor correcting stage (30) convert a rectified DC signal at leads (20, 22), not a fixed DC signal, to an alternating current signal as an input to the primary side of an isolating transformer 50.

App. Br. 13.

4. Appellants contend the Examiner erred in rejecting claim 8 under 35 U.S.C. § 102(b) because:

Church does not show or describe that the purported second stage coupled to the first fixed DC signal and first DC bus as claimed. Because the purported second stage of Church is not coupled to a first fixed DC signal and bus as claimed, Church does not show or describe the claimed power source as alleged.

App. Br. 13–14.

5. Appellants contend the Examiner erred in rejecting claim 14 under 35 U.S.C. § 103(a) because:

Church does not show or describe an isolating stage coupled to a first DC bus having a first fixed DC signal to define or produce a second fixed DC voltage on a second DC bus coupled to the outlet stage. Instead, Church shows and describe its first DC link

or bus with a voltage of 100 VDC downstream or after the isolation transformer (50) of the boost stage or converter.

App. Br. 14.

Church teaches away from the claimed invention such that Church cannot support the conclusion of obviousness. Again, Church teaches a first DC link voltage of 100VDC downstream of the isolation transformer (50). In contrast, the claimed invention provides for a power source with an isolation stage between a first fixed DC signal and a second fixed DC signal.

App. Br. 15.

6. Appellants contend the Examiner erred in rejecting claim 8 on the ground of nonstatutory obviousness-type double patenting because:

Appellant respectfully notes that “[d]omination and double patenting should not be confused. They are two separate issues. One patent or application “dominates” a second patent or application when the first patent or application has a broad or generic claim which fully encompasses or reads on an invention defined in a narrower or more specific claim in another patent or application. Domination by itself, i.e., in the absence of statutory or nonstatutory double patenting grounds, cannot support a double patenting rejection.” MPEP 804 II. . . . [M]erely alleging that the claims of one application is encompassed by purported conflicting claims of another application is not sufficient to support a non-statutory obviousness-type double patent rejection[.]

App. Br. 15–16 (emphasis and citations omitted).

Issues on Appeal

Did the Examiner err in rejecting claim 1 as being obvious?

Did the Examiner err in rejecting claim 8 as being anticipated under 35 U.S.C. § 102(b) because Church fails to describe the limitations argued by Appellants?

Did the Examiner err in rejecting claim 14 as being obvious?

Did the Examiner err in rejecting claim 8 on the ground of nonstatutory obviousness-type double patenting as not being patentably distinct?

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments (Appeal Brief and Reply Brief) that the Examiner has erred.

As to Appellants' above contention 1, we agree with Appellants that Church's power factor correcting stage converts a rectified DC signal to an alternating current signal and *not* to a fixed DC signal as required by the claim 1 limitation "a power factor correcting converter connected to said input rectifier to convert said rectified DC signal to a first fixed DC voltage signal."

As to Appellants' above contention 2, we disagree.⁶ Appellants argue that in Church "the DC voltage across leads (20, 22) is a rectified DC

⁶ Even if we were to agree with Appellants' assertion that Church's voltage at 20 and 22 is not sufficiently constant to be deemed fixed, an artisan would understand that it is conventional to add a capacitor to the rectifier circuit of Church to reduce any ripple voltage and produce a nearly constant DC output voltage. In co-pending U.S. Application 11/051,196, Appellant Kookan presents a Declaration citing RALPH J. SMITH, CIRCUITS, DEVICES AND SYSTEMS, Ch. 3, 73–77 (4th ed. 1984) (hereinafter "Smith"). Smith at page 77 shows use of such a capacitor is conventional. Also, Appellants' Specification at page 24 states that in Appellants' Figure 7 "the output 10 lines 60a, 60b of rectifier 60 are coupled by a large storage capacitor 68 to produce a generally fixed voltage in lines 14a, 14b." That is, Appellant's Figure 7 confirms that claim 8 is intended to cover such a rectifier-capacitor derived fixed voltage.

voltage signal and not a first fixed DC signal” (App. Br. 8). However, we do not find where Appellants’ argument (or the Specification) sets forth a definition of “fixed DC voltage signal” which would preclude reliance on Church’s “rectifier 14” and its “output DC voltage at 20 and 22” (which an artisan would recognize as at least constant within a range of variance (ripple voltage)) to show a “fixed DC voltage signal.” We see no error in viewing Church’s rectifier output voltage as a fixed DC voltage signal.

As to Appellants’ above contention 3, we disagree. As discussed above we deem the output of Church’s rectifier 14 to be a first fixed DC voltage signal. Appellants argument directed to the output of Church’s “dual boost type power factor correcting stage (30)” to convert a rectified DC signal at leads (20, 22) “to an alternating current signal as an input to the primary side of an isolating transformer 50” (App. Br. 13) is not commensurate with the scope of the claim language. Unlike claim 1, no power factor correcting converter is required by claim 8.

As to Appellants’ above contention 4, we disagree. Appellants’ contention 4 is premised on contention 3 and fails for the same reasons.

As to Appellants’ above contention 5, it is similarly based on arguing that Church fails to show or describe a first fixed DC signal. This argument fails for the reasons discussed above. Further, as to Appellants’ assertion that “Church teaches away from the claimed invention.” App. Br. 15. As the United States Court of Appeals for the Federal Circuit has counseled:

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. . . . [I]n general, a reference will teach away if it suggests that the

line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.

In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994). Appellants have not attempted to persuade us that, as to the argued limitation (unidirectional session), any of the references suggest that the line of development flowing from the references' disclosure is unlikely to be productive of the result sought by Appellants. "A reference does not teach away, however, if it merely expresses a general preference for an alternative invention but does not criticize, discredit, or otherwise discourage investigation into the invention claimed." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (quotation omitted). Here, Appellants at most have merely stated what they believe the prior art discloses (App. Br. 14–15), but have not identified how the cited art criticizes, discredits, or otherwise discourages the claimed limitation. At most, Appellants have simply argued that Church does not teach the limitation. Even if we agree, that is not sufficient to "teach away" from the combination.

As to Appellants' above contention 6, we disagree. We do not find Appellants' "domination" argument to be relevant to the rejection on appeal. As Appellants point out, a first patent "dominates" a second application when the first patent has a broad or generic claim which fully encompasses or reads on an invention defined in a narrower or more specific claim in the second application. App. Br. 15. This is not the situation before us. Rather, as the Examiner stated in the Final Action, the patented claims of Daniel include a more detailed (narrower) claimed invention which is deemed to anticipate the broader claim 1 of the application on appeal. Final Act. 7. This is not a statement of "domination."

Therefore, the Examiner do not mention or rely on “domination” in making the rejection. Rather, the Examiner pointed out that the earlier patent claims anticipate appealed claim 1. *See* MPEP § 804 B.1. Appellants argue the Examiner’s reasoning “is not sufficient to support a non-statutory obviousness-type double patent rejection.” App. Br. 16. We disagree. In the anticipation situation before us “an obviousness analysis is not required for the nonstatutory double patenting rejection.” MPEP § 804 B.1. The Examiner anticipation analysis is sufficient. Further, we do not find where Appellants dispute the particular merits of Examiner’s anticipation reasoning.

CONCLUSIONS

- (1) Appellants have established that the Examiner erred in rejecting claims 1–7 as being unpatentable under 35 U.S.C. § 103(a).
- (2) The Examiner has not erred in rejecting claims 8, 9, and 11–13 as being anticipated under 35 U.S.C. § 102(b).
- (3) The Examiner has not erred in rejecting claims 10 and 14–20 as being unpatentable under 35 U.S.C. § 103(a).
- (4) The Examiner has not erred in provisionally rejecting claims 1–20 on the ground of nonstatutory obviousness-type double patenting as not being patentably distinct.
- (5) Claims 1–20 are not patentable.

DECISION

The Examiner's rejection of claims 1–7 as being unpatentable under 35 U.S.C. § 103(a) is reversed.

The Examiner's rejection of claims 8, 9, and 11–13 as being anticipated under 35 U.S.C. § 102(b) is affirmed.

The Examiner's rejections of claims 10 and 14–20 as being unpatentable under 35 U.S.C. § 103(a) are affirmed.

The Examiner's rejection of claims 1–20 on the ground of nonstatutory obviousness-type double patenting is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED